

Trade performance of cashew nut in India: A Markov-chain approach

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ABSTRACT

An attempt was made to examine the direction of exports and imports of cashew in two periods *viz.*, pre-liberalization (1980-81 to 1991-92) and post liberalization (1992-93 to 2003-04), with the help of a Markov-chain model. The results obtained from exports of cashew have shown that USA and The Netherlands were major importers of Indian cashew as indicated by the high probability of retention in both pre and post liberalization periods. The other countries *viz.*, UK, Japan and Australia with low values of probability of retention in pre liberalization period indicated that they were the unstable importers of Indian cashew, where as in post liberalization period, UK and UAE were unstable importers of cashew. The results of analysis on the imports of cashew have shown that Ivory Coast, Tanzania and Guinea-Bissau were major exporters of raw cashew nuts to India as reflected by the high probability of retention. On contrary, Mozambique, Benin and Indonesia had a probability of retention of zero in post-liberalization period indicating that they were the most unstable exporters of raw cashew nuts to India.

INTRODUCTION

Cashew cultivation in India was introduced by the Portuguese during 16th century. Initially, cashew was cultivated to arrest soil erosion, afforestation and wasteland development, but later it became an important cash crop. India is the largest producer, processor, exporter and the second largest consumer of cashew nut in the world.

The total area under cashew in the world is 30.93 lakh hectares. In terms of area under cultivation, India ranks first with 7.70 lakh hectares constituting 25 per cent of area under cashew in the world, followed by Brazil 22 per cent, Nigeria 10 per cent, Indonesia nine per cent, Vietnam eight per cent, Guinea-Bissau seven per cent, Benin; Ivory coast and Tanzania shared six per cent, four per cent, and three per cent, respectively. (The Cashew Statistics, 2004)

Out of the total world production of 18.93 lakh tonnes during 2004, India ranked first with 5.30 lakh tonnes (26.41 per cent). The next major producers, Vietnam and Tanzania contributed 2.90 lakh tonnes (15.33 per cent) each, followed by Nigeria 1.86 lakh tonnes (9.82 per cent), Brazil 1.78 lakh tonnes (9.40 per cent), and Indonesia and Ivory coast 0.90 lakh tonnes (4.76 per cent) each.

In India, the total cashew area was 5.29 lakh hectares in 1990-91, while in 2003-04 cashew area has increased by 45 per cent, *i.e.*,

7.70 lakh hectares. As per the latest statistics, out of the total area of 7.70 lakh hectares in India during 2003-04, Maharashtra ranked first with 1.50 lakh hectares (19.22 per cent) followed by Andhra Pradesh with (17.66 per cent), Orissa (15.58 per cent), Kerala (12.98 per cent), Karnataka (11.94 per cent), Tamil Nadu (11.95 per cent), Goa (7.14 per cent), West Bengal (1.16 per cent) and other states shared less than three per cent.

The total cashew production increased from 2.90 lakh tonnes in 1990-91 to 5.30 lakh tonnes in 2003-04, an absolute increase of 72.41 per cent. Out of total production of 5.30 lakh tonnes, Maharashtra ranked first with 1.20 lakh tonnes constituting 22.43 per cent, followed by Kerala (17.76 per cent), Andhra Pradesh (17.76 per cent), Orissa (13.27 per cent), Tamil Nadu (9.53 per cent), Karnataka (8.59 per cent), Goa (5.98 per cent), West Bengal (1.68 per cent) and other states (2.99 per cent).

On the productivity front, Maharashtra had the highest productivity of 1100 kg of cashew nut per ha followed by Kerala (890 kg per ha), Orissa (850 kg per ha), West Bengal (760 kg per ha), Andhra Pradesh (750 kg per ha), Goa (690 kg per ha) and Tamil Nadu (600 kg per ha), respectively (The Cashew Statistics, 2004).

On the trade front, most of the Indian kernels were exported to American zone (52 per cent) and European zone (24 per cent). The other areas catered by India were West

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